

Abstract

An isolating type self-oscillating flyback converter is disclosed, which includes a coupled transformer, a FET, a transistor and an electro-optical coupled isolating feedback unit, wherein the input terminal of the circuit is connected to the source of the FET through a primary winding of the coupled transformer, the input terminal of the circuit is connected to the collector of the transistor through a resistor R1 and another resistor R2, the source of the FET is connected to the collector of the transistor, one branch of the drain of the FET is connected to the ground through a resistor, while the other branch is connected to the base of the transistor through the parallel connection body of a resistor and a capacitor, the base of the transistor is connected to the output terminal of a secondary output winding of the coupled transformer through the electro-optical coupled isolating feedback unit; the series connection joint between the said resistor R1 and the said resistor R2 is connected to the ground through a speedup capacitor and a secondary winding of the coupled transformer; a loop for implementing the soft start is connected between the said input terminal of the circuit and the series connection joint. Thus the start current of the invention is small and the converter can keep working normally when the input voltage is high.